



Department of  
Environmental  
Conservation

# Doxey and Captain's Cove Condominium Sites

## Proposed Decision Documents

March 23, 2016

# Introductions

## NYSDEC:

Gerard Burke – Section Chief

Heide-Marie Dudek – Project Manager

Nick Acampora – Project Manager

Bill Fonda – Citizen Participation Specialist

## NYSDOH:

Bridget Boyd- Project Manager

## USEPA:

Sal Badalamenti – Chief

Lorenzo Thantu – Project Manager



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# Proposed Decision Documents

- **Doxey** – *Proposed No Further Action (NFA)*
- **Captain's Cove Operable Unit 1 (OU1)** – *Excavation and Backfill*
- **Captain's Cove Operable Unit 2 (OU2)** – *Excavation and Backfill*
- **Captain's Cove Operable Unit 3 (OU3)** – *NFA*

# Doxey

## No Further Action



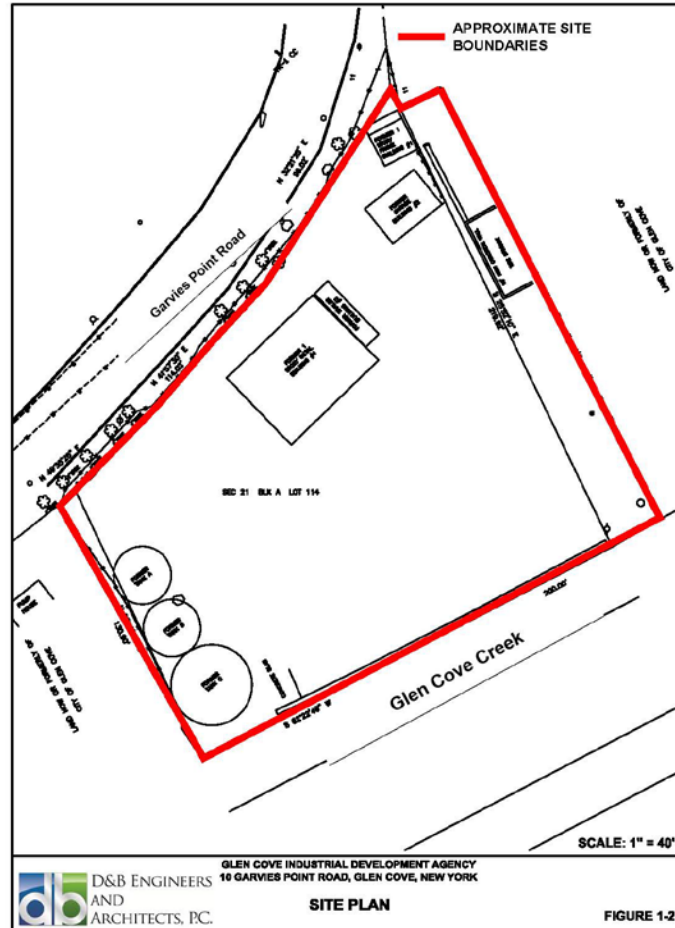
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# Site History

- Former heating oil/distribution facility and salvage yard
- Historical spills lead to contamination of soil and groundwater
- USEPA Brownfield Site
- Cleanup under NYSDEC Stipulation Agreement



# Site Map



# Summary of Contamination

- Primary Contaminants of Concern were:
- Petroleum related Gross Contamination (Fuel Oil)
- Total Petroleum Hydrocarbons (weathered Fuel Oil)
- Semi-Volatile Compounds (SVOCs)
- Arsenic (soil only)



# Exposure

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- The physical contact with a chemical or substance
  - **direct contact** (touching)
  - **ingestion** (eating/drinking)
  - **inhalation** (breathing)
- One or more of these physical contacts **must** occur before a chemical has the potential to cause a health problem.
- Exposure does not necessarily mean a health effect will occur

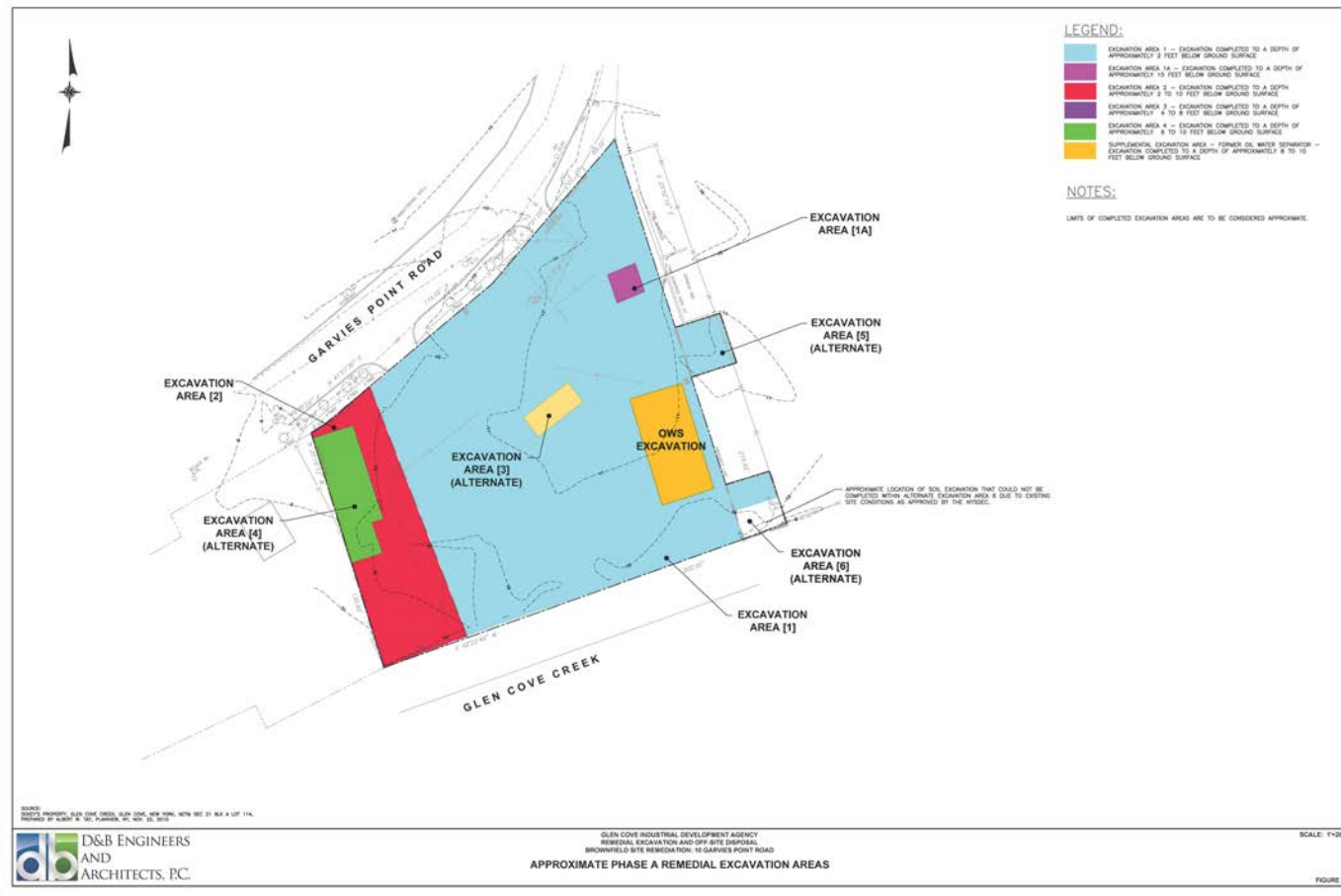




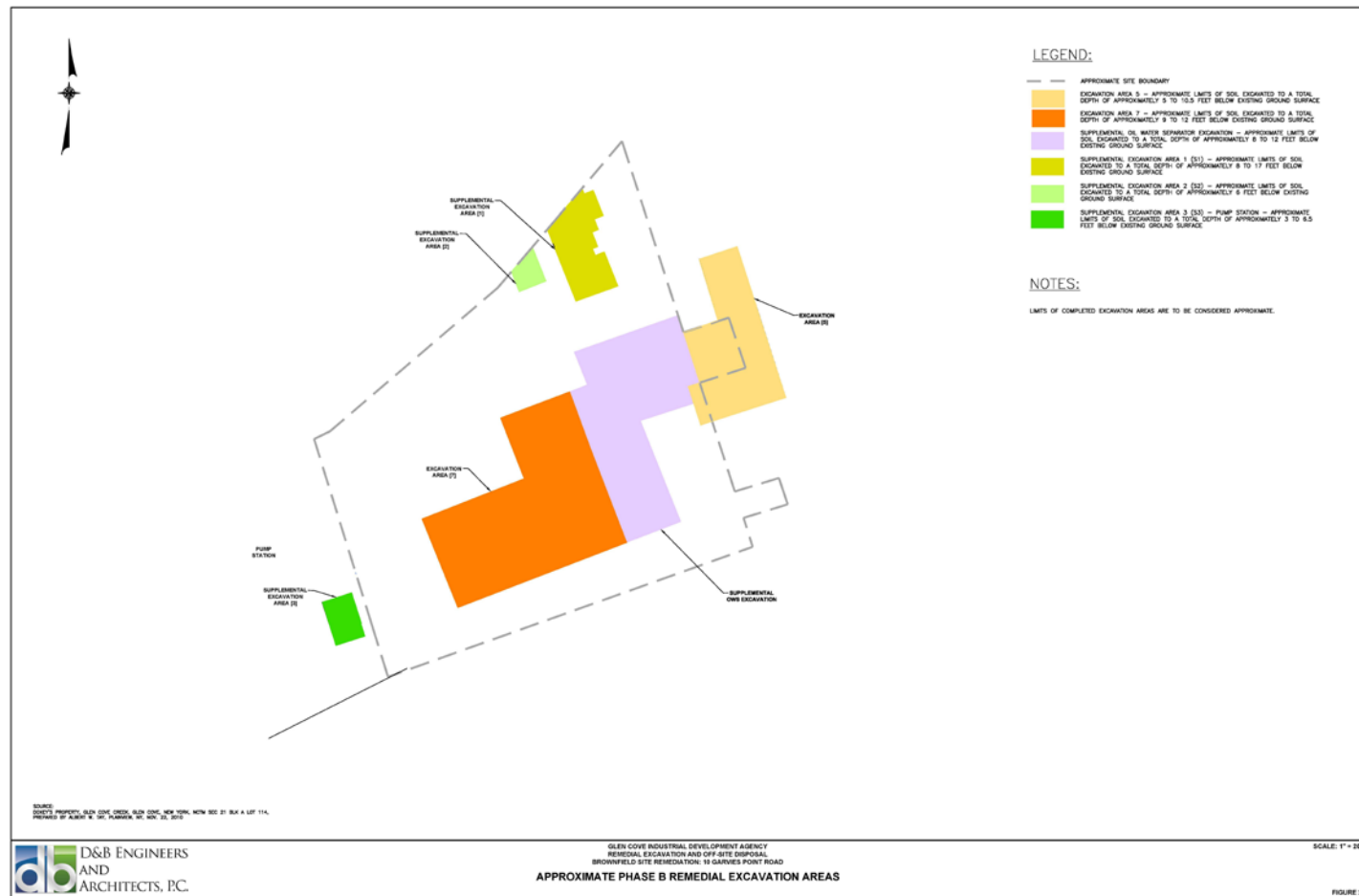
# Potential Exposure Pathways:

- Contact: Direct contact with contaminated soils
- Ingestion: Drinking contaminated groundwater
- Inhalation: Soil Vapor Intrusion

# Phase A Excavation



# Phase B Excavation



# Summary of Remediation

## Remedial Activities Completed:

- ✓ Excavation depths ranged from 2 ft below grade (bgs) to 15 ft bgs
- ✓ 8,335 cubic yards of non-hazardous soil excavated and disposed of properly
- ✓ Demarcation layer
- ✓ Groundwater monitoring network
- ✓ Site Management Plan



# Proposed Decision – No Further Action

- ❖ No Further Action
- ❖ Institutional Control: Environmental Easement
  - Restricted Residential
  - Continued Groundwater Monitoring
  - Site Management

# Exposure Mitigation

- Contact:
  - ✓ Excavation and off-site disposal of contaminated soil
  - ✓ Establishment of a site-wide cap
  - ✓ Institutional controls and Site Management Plan

No Contact = No Exposure

# Exposure Mitigation

- Ingestion:
  - ✓ Area is served by public water
  - ✓ Institutional Controls and Site Management
  - ✓ Groundwater Monitoring

No Ingestion = No Exposure

# Exposure Mitigation

- Inhalation:
  - ✓ Site is vacant / no buildings
  - ✓ Provisions for the evaluation for soil vapor intrusion for any buildings constructed in the future

No Inhalation = No Exposure



# Captain's Cove Condominiums



# Captain's Cove Circa 2000



# Site History

- ✓ Early 1930's and 1940's probable disposal of Glen Cove Creek dredge spoils.
- ✓ 1950's - 1970's used as "Community Dump" for incinerator ash, waste, creek sediments and Li Tungsten (LiT) waste
- ✓ Initial redevelopment abandoned in 1986 when wastes found
- ✓ Listed as NYSDEC Class 2 Site in 1986
- ✓ Remedial Investigation begins 1988



# Site History Continued

- ✓ Portions (Areas A, A', G and G') added to Li Tungsten (LiT) NPL Site as Operable Unit 2
- ✓ 1997 radiological contamination related to LiT Confirmed
- ✓ 1997 City of Glen Cove enters Title 3 Program to remediate Site
- ✓ 1999 NYSDEC issues Record of Decision (ROD) for Title 3 Site
- ✓ 1999 EPA issues ROD LiT OU2



# Contaminants of Concern

## Title 3 Remedy

- *Soil: Metals, Semi Volatile Organics, Volatile Organics*
- *Groundwater: Metals, Semi Volatile Organics, Volatile Organics*

## EPA LiT OU2 Remedy

- *Soil: Arsenic, Lead, Radium-226 and Thorium-232*



# Potential Exposure Pathways

- Contact: Direct contact with contaminated soils
- Ingestion: Drinking contaminated groundwater
- Inhalation: Soil Vapor Intrusion

# Remedies Implemented

## Title 3 Remedy

- *Excavation of waste delineated by solid waste*
- *Segregation and disposal*
- *Reuse of soil as backfill as appropriate*
- *Soil Cover*
- *GW monitoring*
- *Institutional Control – Commercial Development*

## EPA LiT OU2 Remedy

- *Excavation and disposal of radiological contaminated soil*
- *Excavation and disposal of arsenic and lead contaminated soil to GW*
- *Soil Cover*
- *Institutional Control – Restricted Residential*



# Captain's Cove Operable Units



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# Boundary Modification

To allow the Department to better manage the Captain's Cove Site during remediation and redevelopment and to ensure a consistent approach across the site, a boundary modification was completed to:

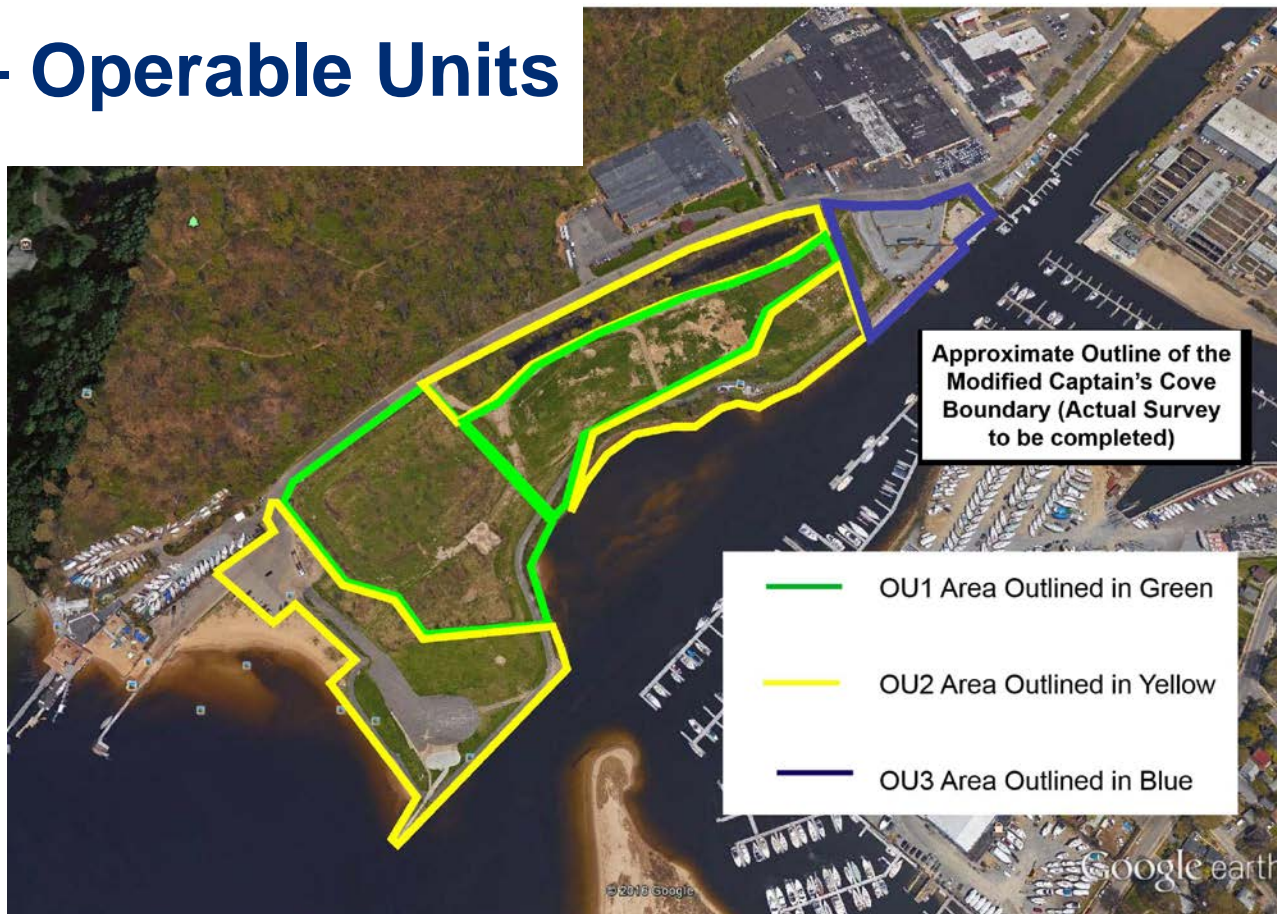
- ❖ Incorporate Li Tungsten Operable Unit 2 (Areas A, A', G and G')
- ❖ Incorporate the areas of Captain's Cove Property outside of the Title 3 and Li Tungsten OU2 remedial areas

# Captain's Cove – Operable Units

**OU1** – Original Title 3 Area and Li Tungsten  
OU2 Area A and A'

**OU2** – Areas Outside  
Title 3 and Li Tungsten  
OU2 Remedial Areas

**OU3** (Ferry Terminal)  
– Li Tungsten OU2  
Area G and G'



# Operable Unit 3

## *Ferry Terminal*



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# OU3 – Ferry Terminal

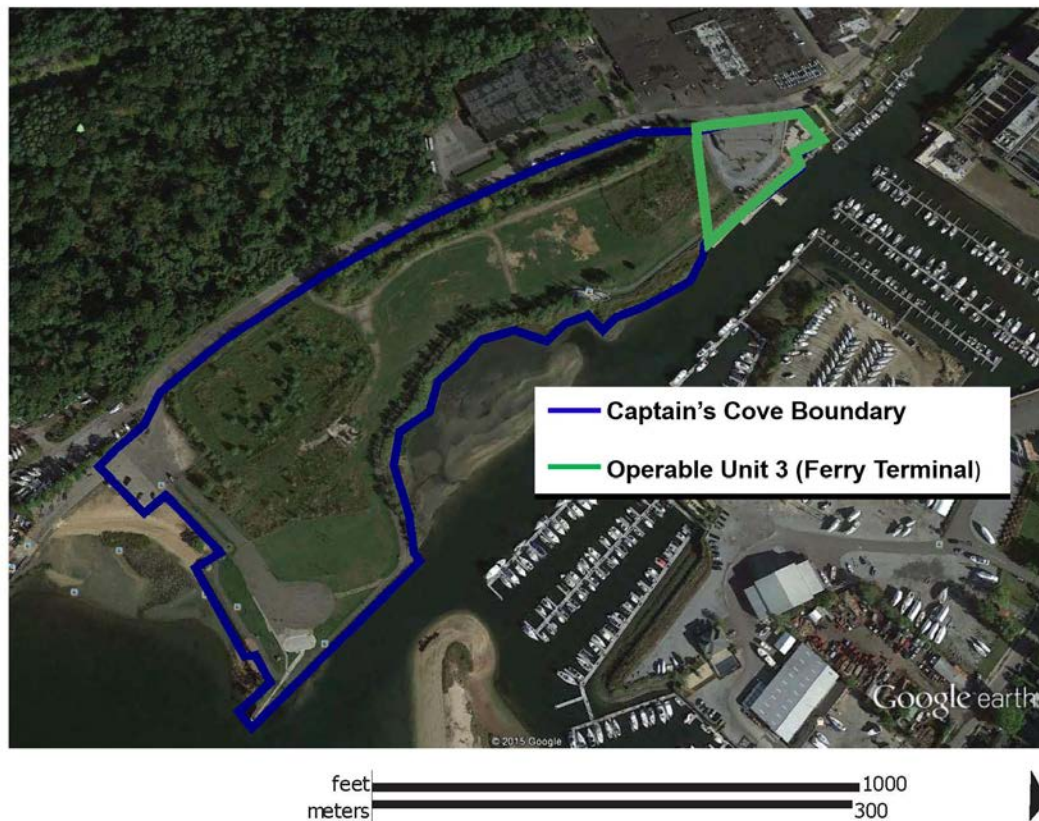


FIGURE 1 Site Boundary

# Groundwater Remedial Objectives

## RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

## RAOs for Environmental Protection

- Restore groundwater aquifer to pre-disposal/pre-release conditions, to the extent practicable
- Remove the source of groundwater or surface water contamination



# Soil Remedial Objectives

## RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.

## RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.



# Soil Vapor Remedial Objectives

## RAOs for Public Health Protection

- Mitigate impact to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

# Remedial Activities

- Remediation in Accordance with the 1999 Li Tungsten Record of Decision (ROD)
- Designated Area G and G' (approx. 1.5 acres)
- Excavation of soil contaminated with arsenic, lead, radium-226 and thorium-232
  - Excavation depth between 3 and 14 ft bgs
- Segregation of radionuclide-contaminated soil and non-radionuclide soil for proper disposal
- Site cover



# EPA Remediation Areas G and G'



# OU3 – Area G'

